

parallel to said substrate, a conductive wall filling said groove in each of said first and second interlayer insulation films and extending from a bottom principal surface thereof to a top principal surface thereof; and a conductive pattern making a contact with a top part of said conductive wall and having a principal surface coincident to said top principal surface of said interlayer insulation film, said conductive wall changing a direction thereof repeatedly and alternately in one of a triangular wave pattern and a rectangular wave pattern in said plane in correspondence to said guard ring pattern,

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said conductive wall in said first interlayer insulation film being offset with respect to said conductive wall in said second interlayer insulation film in a direction parallel to a principal surface of said substrate when viewed in a direction perpendicular to said principal surface of said substrate,

and wherein said interlayer insulation films comprise a first insulation film that supports said conductive wall laterally and a second insulation film that supports said conductive pattern laterally,

said conductive wall and conductive pattern comprising Cu,

said conductive pattern and said second insulation film having coplanar top principal surfaces,

a bottom edge of said conductive wall making an intimate contact with said top principal surface of said conductive pattern, and

said conductive pattern and said second insulation film located at a top part of said multilayer interconnection structure being covered continuously with an insulation film.